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## PATENT ABSTRACTS OF JAPAN

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(21)Application number : 03-274648 (71)Applicant : KYOCERA CORP

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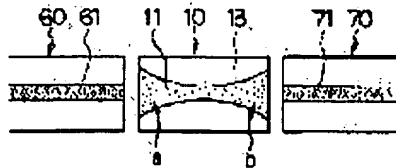
(54) OPTICAL FIXED ATTENUATOR

(57)Abstract:

PURPOSE: To provide the optical fixed attenuator which is small in size and high in strength and has stable characteristics of connections with optical fibers.

CONSTITUTION: This optical fixed attenuator 10 is connected between the two optical fibers 60 and 70 of a transmission system. The optical fixed attenuator 10 consists of a specific-length optical fiber consisting of a core 11 and a clad 13 and the dopant in areas (a) and (b) of the core 11 nearby both the ends of the optical fiber is thermally diffused to expand the core diameter, and

consequently the mold field diameter of the part where the core diameter is expanded is made different from the mold field diameters of the optical fibers 60 and 70 of the transmission system. Consequently, light propagates in the optical fibers 60 and 70 has loss in the areas (a) and (b) wherein the diameter of the core 11 of the optical fixed attenuator 10 is increased and then attenuated by a specific quantity.



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